

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A ~~keyboard having~~ a user programmable input apparatus with a keyboard, comprising:

a plurality of keys disposed ~~thereon~~ on the keyboard for input operations;

a microprocessor coupled to the plurality of keys for receiving an input therefrom;

a nonvolatile memory coupled to the microprocessor and programmable by operating the plurality of keys; and

a transmission arrangement connected to the microprocessor for outputting data external to the keyboard;
wherein the plurality of keys includes a set of special control keys programmable to simulate a cursor control device, the set of special control keys being programmable to have a different report rate from that of the other of the plurality of keys to coincide with requirements of a cursor control device.

2. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the microprocessor and nonvolatile memory are integrated in a single chip.

3. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the nonvolatile memory is programmed with a user programmable password.

4. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the nonvolatile memory is programmed with a user programmable hot key.

5. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the nonvolatile memory is programmed with a user programmable data.

6. (Currently amended) The ~~keyboard~~ input apparatus of claim 3, wherein the plurality of keys include a key to program the password.

7. (Currently amended) The ~~keyboard~~ input apparatus of claim 4, wherein the plurality of keys include a key to program the hot key.

8. (Currently amended) The ~~keyboard~~ input apparatus of claim 5, wherein the plurality of keys include a key to program the data.

9. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the plurality of keys include a key to initialize a programming procedure of the nonvolatile memory.

10. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the cursor control device simulated by the set of special control keys is a mouse.

11. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the cursor control device simulated by the set of special control keys is a joystick.

12. (Cancelled).

13. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein at least one of the set of special control keys is programmable to simulate one of the other of the plurality of keys.

14. (Currently amended) The ~~keyboard~~ input apparatus of claim 13, wherein the ~~the~~ at least one special control key has a predetermined report rate different from that of the key being simulated.

15. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the plurality of keys are operated to change a key mapping by programming the nonvolatile memory.

16. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, wherein the nonvolatile memory is programmed with a command thereto by operating the plurality of keys.

17 - 21. (Cancelled).

22. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, further comprising a display connected to the microprocessor to display a content stored in the nonvolatile memory.

23. (Currently amended) The ~~keyboard~~ input apparatus of claim 1, further comprising an application software program executing external to the keyboard to communicate with the microprocessor.

24. (Currently amended) The ~~keyboard~~ input apparatus of claim 23, wherein the application software program is used to program the nonvolatile memory.

25. (Currently amended) The ~~keyboard~~ input apparatus of claim 23, wherein the application software program is used to perform a function programmed in the nonvolatile memory.

26. (Currently amended) A method for operating a ~~keyboard having a user~~ programmable input apparatus with a keyboard, the keyboard having a microprocessor, a nonvolatile memory and a transmission arrangement, the keyboard having a plurality of keys and at least one special key, the method comprising the steps of:

detecting a trigger signal of a key of the keyboard;

storing a first data into the nonvolatile memory when the trigger signal is a programming signal;

transmitting a normal data corresponding to the trigger signal external to the keyboard by the transmission arrangement when the trigger signal is a normal keying signal;

reading a second data corresponding to a programmed key from the nonvolatile memory and/or executing a function corresponding to the second data when the trigger signal matches the programmed key; and

programming the special key to simulate a cursor control device and changing a reporting rate of the special key to be different from that of other of the plurality of keys to coincide with requirements of [[a]] the cursor control device.